

**JYOTI NIVAS COLLEGE AUTONOMOUS
SYLLABUS FOR 2021 BATCH AND THEREAFTER
PROGRAMME: BCA
PROBLEMSOLVING LAB USING C**

COURSE OUTCOMES (COS):

1. Enable them to read, understand and trace the execution of the programs written in C language
2. Enable them to develop programming skills.
3. Enable them to write the C code for a given algorithm

Write, and execute C program for the following:

1. To read radius of a circle and to find area and circumference.
2. To read three numbers and find the biggest of three.
3. To check whether the number is prime or not.
4. To read a number, find the sum of the digits, reverse the number and check it for palindrome.
5. To read numbers from keyboard continuously till the user presses 999 and to find the sum of only positive numbers.
6. To read percentage of marks and to display appropriate message (Demonstration of else-if ladder).
7. To find the roots of quadratic equation.
8. To read marks scored by n students and find the average of marks (Demonstration of single dimensional array).
9. To remove duplicate element in a single dimensional array.
10. To perform addition and subtraction of matrices.
11. To find factorial of a number.
12. To generate Fibonacci series.
13. To remove duplicate element in a single dimensional array using functions.
14. To find the length of a string without using built-in function.
15. To demonstrate string functions.
16. To read, display and add two m x n matrices using functions.
17. To read a string and to find the number of alphabets, digits, vowels, consonants, spaces and special characters.
18. To swap two numbers using pointers.
19. To demonstrate student structure to read & display records of n students.
20. To demonstrate the difference between structure & union.